ABSTRACT

PURIFICATION AND CHARACTERIZATION OF METABOLITE 5TH FRACTION EXTRACT ETHYL ACETATE *Aspergillus salwaensis* STRAIN DTO297C1 ISOLATED FROM *Chromolaena odorata.*

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Endophytic microbes is microbes that live in plant tissues without endangering their hosts. Endophytes produce some substances that have biological activity. *Aspergilus salwaensis* DTO297C1 is one of the endophytic fungi isolated from *Chromolaena odorata*. It is prove that 7 of 18 ethyl acetate fractions have an inhibiting activity of *Staphylococcus aureus* ATCC 6538, *Escherichia coli* ATCC 8739, and *Candida albicans* ATCC 10231.

The objective of this study was to purify and characterize metabolite from fraction-5. Purification using column chromatography with silica gel 60 and n-hexane : ethyl acetate-methanol 20% gradient eluent. It is obtained 400 vial that combined and become 9 subfractions, 5.1 – 5.9. 5.1 and 5.6 subfractions was analyzed using Thin Layer Chromatography with silica gel 60 F254 as stationary phase and Chloroform:methanol (9,5:0,5) as mobile phase. 5.1 and 5.6 subfractions have active compound in UV 254 scan, positive in H_2SO_4 anisaldehyde stain removal, and 5.1 subfraction positive in FeCl3. 5.1 and 5.6 subfractions analyzed using GC-FID and GC-MS. 5.1 shows predicted compound 2,4-Dihydroxy-3-methylacetophenone and 5.6 shows predicted compound Alpha-Terpinolene dan Camphor.

Keyword : secondary metabolites, endophytic fungi, Aspergillus salwansis,2,4-Dihydroxy-3-methylacetophenone and Alpha-terpinolene